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Availability of AI and AI Anchors in Social Media

—Take TikTok as an Example

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Abstract: New media technology is booming, and social platforms continue to update media-related functions. Many platforms with live broadcast functions are gradually pouring in AI anchors as substitutes for human anchors who work continuously for 24 hours. AI anchors were mainly used to replace professional hosts at the beginning for the main purpose of disseminating information, and then AI anchors were used for entertainment, forming a popular situation. As live anchors face different traffic in different time periods, they need high-intensity working hours, which leads to high signing fees, excessive work pressure and other body-related occupational diseases. More and more live broadcasting unions begin to use AI anchors for live broadcasting, which has now played a role in live broadcasting e-commerce. In terms of possible problems, the future AI anchor still has problems in terms of user positioning and user acceptance, but it has certain positive effects on reducing labour costs, improving network quality and delivery accuracy.

Keywords: AI anchor, Virtual anchor, E-commerce, Artificial intelligence.

1. Introduction

Ai-mediated Communication (AI-MC) refers to the interpersonal interaction in which an AI system acts as a mediator to modify, enhance or generate messages to help achieve the communication goals of human users [1]. This paper takes TikTok as an example because it including AI live rooms with a large number of users, which is convenient for me to collect data through questionnaires. Since artificial intelligence technology has entered human life, all walks of life have more or less use of artificial intelligence technology, such as online payment, network broadcasts, live delivery of goods and other media-related applications. Especially the development of AI anchors, AI anchors as a concept and technical application, there is no clear birth year, but with the development of artificial intelligence technology, such as computer vision, natural language processing and other technologies, the concept and products of AI anchors gradually emerged and developed. In particular, in the official programs of China Central Television, AI anchors have appeared one after another to reproduce the prototype of real anchors. There is much research on AI anchors. This paper will simply sort out the brief history of AI anchors, analyze the advantages and disadvantages of AI anchors in the field of e-commerce, combine with AI technology, practical applications and personal data collected, think about the usability of AI anchors selling, and explore the positive impact of AI anchors in the future.

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AI was born as early as 1970. Logo Group was founded by Seymour Papert as part of MIT's AI experiment and achieved success. The success of the Logo experiment stimulated people's active research on artificial intelligence. In 1980, researchers adjusted the programming structure to make it easier for children to participate, until around 2017, researchers began to develop more artificial intelligence activities in large numbers: speech generation, speech recognition, picture image recognition and other technologies [2].

In 2001, the world's first virtual host, Ananova, was born. At the same time, the Japanese made an AI singer, Yuki, another AI singer Alana born in China, and Vivian from the US, Lusia from South Korea. At that time, the technology faced with the performance of virtual people in front of the screen could only achieve relatively flexible body movements, but there was not too detailed expression processing.

As an extension based on virtual idols, virtual anchors combine virtual anchors and idols and have become an important part of the composition of Chinese virtual people [3].

Although special effects production was a big problem at that time, Luo Tianyi, as the Chinese AI Song Ji, was able to get on the stage of China's 2021 Spring Festival Gala, interact with the audience and perform. who opened the live broadcast with goods, was the peak of the first show, and even appeared in the millions of fans of the Internet celebrity Li Jiaqi's live broadcast room, the cooperation pit fee of up to Nine hundred thousand yuan.

Liu Yexi, known as a virtual phenomenon, she is a virtual beauty anchor. The first video had more than 3 million likes, and the second day after a night out, the whole network was hot, Liu Night Xi released a makeup picture video. With movie-grade picture texture, suspense plot and post-special effects, Liu Yaxi achieved a phenomenal rise in fans, 1 million in 24 hours, 2.3 million in 3 days on the line, and more than 4.5 million in two contents. Such amazing traffic data cannot help but consider the production cost. It is estimated that the cost of producing such a high-quality short video is about 1 million yuan or more, but combined with the support of the TikTok platform, the actual cost will be lower. This incident also reflects that now short videos are no longer a common person inside the volume that can be successful, but a movie-grade team entry dimension reduction blow.

2. The Combination of AI and E-Commerce

2.1. A Lot of Spaces for AI Anchors

The emergence of e-commerce has indeed suppressed offline entity operations in a sense, and some offline stores have been replaced by the e-commerce business model accepted by the public during the COVID-19 period. However, the existence of e-commerce has accelerated the change and use of procedures to some extent, and more and more people have the use of electronic products.

Secondly, since 2019, with the increase in the number of live broadcasts, the number of viewers has also increased significantly, which is the recognition of the future of the current network broadcast[3].

2.2. AI Anchors Use More Efficient Ways on the Internet to Improve Stickiness with Consumers

What's more, from a psychological point of view, e-commerce has a stronger ability to establish stickiness with consumers. From the construction of the broadcast room, the anchor person can set up a symbolic broadcast room to attract the attention of consumers. In such a narrative space, the audience can be quickly immersed in the closed live streaming media [4]. It needs to have some capabilities: user profile recommendation and implementation recommendation. Although the real anchor can also set up an image on the network, the real anchor is, after all, a person with emotions,

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in the face of the high-speed developed Internet, personal misbehaviour once it appears is a permanent mark, and the AI anchor can reduce the probability of such things.

Due to the privacy policy agreement signed by the user, the background can grasp the personalized needs of the audience at any time, so through the calculation of the background, more relevant content is recommended to get the user's attention for a longer period. The algorithm can also capture other information about the user and summarize new information, such as spending history. By sampling consumption records to calculate consumption levels, to recommend products more in line with the price acceptable to consumers, this technology is to kill big data. For the processing of real-time barrage, AI, as an auxiliary tool, can timely filter and review, shield illegal barrage, constantly update and give users a better experience, and shape a healthier cyberspace. More and more companies and news publishers are piloting and adopting artificial intelligence (AI) technology instead of human moderating individual comments in their management platforms, as AI driven technology now has the ability to efficiently process large numbers of platform comments [5]. Through the audience's preferences, AI can also recommend more relevant videos through the user's posts and comments, to improve the viscosity established with the user.

2.3. The Use of AI Anchors Reduces Labor Costs

AI can help shape the image of AI anchors. From the generation and design of virtual anchors to synthetic speech, combined with expression actions, and finally generate AI anchors that can interact with the audience, have vivid expressions, logical speech, and reasonable body movements. The process should take no more than an hour. In the Douyin broadcast room, many broadcast rooms have used AI anchors. In some on-air studios, anchors can be seen dressing up in less than a second, often without speaking, and adding transition effects between costumes. In some of the broadcast rooms it can be observed that eight to ten beautiful women inside are wearing the same clothes, to appear not blunt, their legs are moving back and forth. By sending gifts, the action of the anchors is aroused, and after one night's accumulation, the monthly income can reach 100,000 yuan, excluding the platform income. The production cost of such a broadcast room, the market price of 9.9-yuan, 19.9 yuan a virtual person ranging from the selling price, only needs to consume no more than one thousand yuan a month.

3. Technological Use in AI Service Online

In this era of increasing electronic products, the development of the Internet has promoted the activity and improvement of various social media. Due to the increase in the number of users, the use of AI calculation data and the big data push of AI anchors can more accurately push the direct broadcast room that meets the user's "taste" in the form of light rhyme space to achieve more accurate positioning of potential customers. However, based on user questionnaires, some believe that the technical processing of AI anchors has problems such as stiff and single responses, which will affect customer satisfaction. If an enterprise hopes to achieve stable and improved sales by improving customer retention, so as to develop new products and enhance after-sales service, it can summarize customers' views on service by analyzing the core characteristics that affect customer satisfaction [6]. In the AI response satisfaction survey, men scored higher [6].

Deep learning offers a potent solution for automatically modelling users' musical tastes and preferences. By leveraging advanced machine learning algorithms, deep learning can analyze individuals' historical listening patterns, engagement data, and other pertinent information to construct robust profiles of their musical interests. This data-driven approach transcends conventional methods, providing a nuanced understanding of each user's unique musical proclivities. With its remarkable capacity to extract intricate patterns and uncover latent relationships within vast datasets,

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deep learning opens up new avenues for delivering highly personalized and delightful music experiences tailored to individual preferences. This technology holds immense promise for enhancing music discovery, curation, and recommendation systems, elevating the way we interact with and appreciate the rich tapestry of music [7].

AI ushers in a transformative era for video, enabling richer personalization and authentic user experiences throughout the production and analysis lifecycle. By automating tedious manual tasks, AI catalyzes efficiencies and unlocks deep content indexing capabilities previously unattainable. As AI scrutinizes video content, quality assessment matrices become more robust and insightful.

Ultimately, AI opens new frontiers in video, allowing for highly personal and interactive viewing experiences that deeply engage audiences. The immersive narratives and tailored journeys crafted through AI's video content analysis and customization prove more delightful and memorable than ever before. Video transforms from a passive medium into an individualized adventure amplified by artificial intelligence's ability to adapt and optimize the storytelling experience [8].

4. Personal Data Collective

This data uses a total of 46 people's answers

Table 1: The preference of people like AI and human hosts

Options	Chose times	Take up a proportion of
Human host	40	86.96%
AI host	0	0.00%
Both like	6	13.04%
Number of respondents	46	

As shown in Table 1, the vast majority of people are opposed to AI anchors.

Table 2: The reasons of people like human hosts

Options	Chose times	Take up a proportion
Interacting with the audiences is more dynamic	33	71.74%
There is a sense of intimacy	30	65.22%
The action expression is more vivid	16	34.78%
Strong adaptability to change	18	39.13%
Don’t like them	3	6.52%
others	1	2.17%
Number of respondents	46	

As shown in Table 2, 71.74 precent of people think the most important is the action of hosts, whether it's intimacy or natural expression, more interaction is what audiences want.

Table 3: The reasons of people like AI hosts

Options	Chose times	Take up a proportion of
Better image than a human anchor	15	10.87%

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Table 3: (continued).

It can be viewed at any time	7	15.22%
Reduce labor costs	9	19.57%
Fewer mistakes than human	8	17.39%
Don't like them	23	50.00%
Other reason	1	2.17%
Number of respondents	46	

As shown in Table 3, 19.57 percent think it can reduce the labor force. 17.39 percent poeple think AI anchors can reduce the mistakes during live streaming, many anchors fried caused by verbal errors that deviate from the company's intentions and end up causing irreparable damage.

Table 4: People consider the impact of the emergence of AI anchors on the network

Options	Chose times	Take up a proportion of
The overall quality of hosts is improved	13	28.26%
Nothing changed	4	8.70%
I don't know	13	28.26%
Speed up the internal roll of the hosts	17	36.96%
Others	2	4.23%
Number of respondents	46	

As shown in Table 4, due to the rules implanted by AI, it is impossible to carry out the performance of pornography in the public live broadcast platform openly, and the degree of verbal rigor can improve the overall host literacy, and 28.26 percent people agree that AI will help to improve the net environment. But because many people care about the degree of saturation between industries. The Matthew effect will make most people lose resources in their positions, so some people will worry that AI hosts will threaten the balance of the entire network live broadcast circle.

But in these data, we can see that even if they hate AI anchors, they also recognize its prospects and even think that it threatens the existence of real anchors. In the data just now, 50 percent of people said they don't like AI anchors, and 28.26% of people said they did not know.

Among these data, there is a very fatal point that artificial intelligence cannot flexibly use human memes. It's like when you ask people why they like human anchors they think they're smarter.Because increased playfulness helps increase user engagement, the differences in perceived playfulness between supervised and assisted virtual anchors driven by AI-human collaboration are reduced when humorous responses occur[9].

Here is my rewrite of the provided text about factors contributing to the appeal of live streamers:

The study revealed that participants were drawn to remain in certain live stream rooms due to the streamer's entertaining personality and physical attractiveness. Specifically, some viewers highlighted the streamer's sense of humor and comedic flair as key reason for their continued viewership. Others openly admitted that a streamer's good looks or sexual appeal motivated them to stay engaged. Participants even stated their willingness to purchase virtual gifts for streamers they found attractive.

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The data illustrated that beyond just interactivity, several psychological factors played a role in sustaining viewer interest and monetization. The ability of streamers to facilitate social status displays, provide humor, and leverage sexual charisma emerged as influential dynamics underpinning their appeal to audiences. Humorous banter, physical attractiveness, and creating a virtual space for portraying desired social identities were identified as powerful draws keeping viewers tuned in and buying virtual goods [10].

To sum up, people's views on AI and the application of AI anchors are not positive, but they admit that the existence of AI anchors will endanger human anchors, and it is more suitable to appear in the network under certain circumstances. However, most people oppose the current situation of AI anchors bringing goods online and indicate that they will not buy goods in the AI anchor broadcast room. The next AI can focus more on cultivating communication ability with customers. The fun enhancement of AI anchors should receive more attention.

5. Conclusion

AI host live streaming is an emerging technology that has undergone a long development process, from its conceptual origins in the 1970s to the technical breakthroughs that enabled the first 2D virtual hosts like Ananova in 2001, and then the advent of fully simulated 3D AI hosts. The technology has now matured to a point where AI hosts are finding commercial applications across various platforms.

One of the key advantages of AI hosts is their cost-effectiveness. They can work around the clock without breaks, at a fraction of the cost of human hosts. This makes them an enticing option for businesses looking to minimize operational costs. Additionally, AI hosts have a perfectly curated appearance that can be customized to align with brand images and audience preferences, giving them an edge over human counterparts.

Moreover, AI hosts offer businesses the opportunity to create virtual idol IPs that cater to the increasingly dominant youth consumer demographic. The generation born after 1990 has a penchant for virtual idols, and AI hosts can serve as long-lasting, highly malleable brand ambassadors capable of driving engagement, sales, and cultivating brand loyalty.

However, the rise of AI hosts is not without its drawbacks. There are concerns that their proliferation could exacerbate industry oversaturation, posing a threat to human hosts' job security. Furthermore, while AI hosts excel at delivering scripted content, they cannot currently improvise and engage in organic banter, a quality that many viewers appreciate in human hosts.

Survey data reflects these contrasting perspectives. While half of the respondents expressed dislike for AI hosts, nearly 20% acknowledged their potential for reducing labor costs. Additionally, an equal proportion (28.26%) believed that AI hosts could improve the online environment, while another portion (28.26%) was unsure of their impact.

As technology continues to evolve, it is crucial to strike a balance between harnessing its potential and preserving the human element that many viewers value. Rather than allowing AI hosts to become our masters, we must strive to use them as tools that complement and enhance human creativity and expression.

In conclusion, AI host live streaming represents a significant technological advancement with substantial commercial prospects. While it offers cost-saving and marketing advantages, it also raises concerns about job displacement and the loss of human authenticity.

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